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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/570,934		Thomas Rothmayer	FRZ108US	3787
23122	7590	10/02/2006	EXAMINER	
RATNERPRESTIA			LAXTON, GARY L	
P O BOX 980			ART UNIT	PAPER NUMBER
VALLEY FORGE, PA 19482-0980			2838	

DATE MAILED: 10/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/570,934

Applicant(s)

ROTHMAYER, THOMAS

Examiner

Gary L. Laxton

Art Unit

2838

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/8/06</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

2. Claims 1-8 are objected to because of the following informalities:

Claim 1 recites the limitation "said input voltage" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "said storage inductor" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "said first semiconductor switch" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the voltage drop" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "said sensor resistor" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "said second semiconductor" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the current" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the control electrode" in line 7. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the switching path" in line 8. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "said first duration" in line 10. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the contact" in line 11. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "said output" in line 12. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "said second duration" in line 13. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "rectifier diode" in line 13. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "said capacitor" in line 14. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the switching input" in line 14. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the contact" in line 15. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites the limitation "the primary winding" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites the limitation "said transformer" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites the limitation "said secondary winding" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites the limitation "which are connected the said rectifier diode" [sic] in line 3.

Claim 4 recites the limitation "said capacitor" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "said drop resistor" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "said resistor" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites the limitation "said reverse pole protection diode" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 6 recites the limitation "said output voltage" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitation "the switching path" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitation "said third semiconductor" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitation "said Zener diode" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitation "the switching path" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 8 recites the limitation "the collector-emitter path" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 8 recites the limitation "the phototransistor" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 8 recites the limitation "said optocoupler" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 8 recites the limitation "whose sending diode" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 8 recites the limitation "said Zener diode" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1 line 8, the phrase "can be" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. Claims 2-8 inherit the same from claim 1.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watson et al. (US 6,504,733).

Watson et al. disclose a switch mode power supply with first and second switches (Q2, Q3); resistors (R9, R11, R12); capacitor (21); transformer (T1); primary winding (L1); secondary winding (L2); rectifier diode (D8).

However, Watson et al. does not disclose an output capacitor.

Takamatsu teaches using a diode and capacitor on the output (2) for rectifying and smoothing the output voltage.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Watson et al. to include an output capacitor, in combination with the rectifying diode for rectifying and smoothing the output voltage as taught by Takamatsu.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary L. Laxton whose telephone number is (571) 272-2079. The examiner can normally be reached on Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Karl Easthom can be reached on (571) 272-1989. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'G-L Laxton', with a stylized flourish at the end.

Gary L. Laxton
Primary Examiner
Art Unit 2838

9/27/2006